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Honorable Commissioner for Patents
Alexandria, VA 22313

Attention: Examiner H. V. HO
Group 2818   - Facsimile No. 703-872-9306

Re: **T. TSUJIKAWA et al - U.S. Appln. Ser. No. 10/776,190**
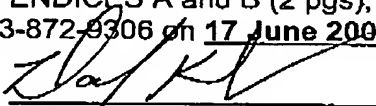   **Attorney Docket No.   501.36887CC8**

SUBMISSION OF LETTER

Sir:

Applicant hereby submits the attached paper entitled, "REQUEST FOR
RECONSIDERATION" (8 pgs.) and APPENDICES A and B (2 pgs), in the above-
identified application.

CERTIFICATE OF TRANSMISSION:

I hereby certify that the attached paper entitled "REQUEST FOR
RECONSIDERATION" (8 pgs.) and APPENDICES A and B (2 pgs), is being formally
filed in the USPTO via Facsimile No. 703-872-9306 on 17 June 2005.

David K. Snyder

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501.36887CC8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: T. TSUJIKAWA et al

Application No.:   10/776,190

Filed: February 12, 2004

For: NON-VOLATILE MEMORY DEVICE

Art Unit: 2818

Examiner: H. V. HO

REQUEST FOR RECONSIDERATION

Commissioner for Patents   June 17, 2005
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated March 17, 2005, Applicants respectfully request reconsideration for the reasons set forth below.

With regard to the rejection, it is noted that all grounds for the rejection are either directly or indirectly based on the position that there is no support in the claims for the limitations regarding the third type format command of claim 13 or the third command format of claim 14. (For the remainder of the remarks, reference will be made specifically to the "third type format command" of claim 13, but the comments will pertain to the third command format of claim 14 as well). For example, claims 13 and 14 are both rejected under 35 USC §112, first paragraph, based on the position that there is no support for this claim language concerning the third type format command. In addition, because of this perceived lack of support for this limitation, they are not given any weight in the independent claims 13 and 14.

Correspondingly, claims 13 and 14 have also been rejected based on obviousness type double patenting and 35 USC §102 as being anticipated by USP 5,881,002 to Hamakawa since the claims are being considered without these limitations.

In response, applicants respectfully submit that the limitation of the third type format command is, in fact, clearly supported by the application, which can be appreciated by a careful study of the drawings and corresponding descriptions. The following discussion provides an explanation of how the claim terminology can be read on the various drawings to illustrate how the claim language is, in fact, supported by the applicants disclosure. Based on this, applicants respectfully submit that these limitations must be given weight and, once this is done, the obviousness type double patenting rejection and the prior art rejection based on Hamakawa will both be overcome.

Turning first to the 35 USC §112, first paragraph rejection, applicants provide the following two examples of support of the claim limitations regarding the first, second and third type format commands found in claim 13 (again noting that the following discussion also pertains to the first, second and third command formats of claim 14).

The first example is based on Figs. 55, 64 and 61, as shown in Appendix A which is a marked drawing of these three Figures. Using claim 13 as an example, the first type format command includes a first type command without a second type command, as well as address information following the first type command. As shown in the marked copy of Fig. 55 in Appendix A, the "first type command" is the step S30 (i.e., Retry Programming Command). The "address information after said

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first type command" of claim 13 can be read on the "Input Section Address 1" S31

(as well as the step S32). It can be seen that no second type command is found in

Fig. 55.

On the other hand, the second type format command of claim 13 includes the

same elements as the first type format command (i.e., a first type command and

address information) as well as a second type command. This can be seen from the

attached marked copy of Fig. 64 shown in Appendix A. Specifically, the first type

command of claim 13 can be read on the "Fetch 1st Partial Erasing Command" step

S90. The claimed address information can be read on the "Fetch Sector Address"

step S91, while the claimed second type command from claim 13 can be read on the

"Fetch Second Command" step S92.

Given this background with regard to the first and second type format

commands, and the support for them in the Specification, attention is next turned to

the format command at issue in the present matter, namely, the "third type format

command." Applicants respectfully submit that this can be read on Fig. 61, as shown

on the marked copy thereof in Appendix A. In particular, the first type command can

be read as the "Fetch 1st Rewrite Command" step S60. The subsequent address

can be read on the "Fetch Sector Address" step S61. The second type command

from claim 19 for the third type format command can be read on the step "Fetch

Second Command" of step S64 in Fig. 61. Finally, the "data located between said

address information and said second type command" of claim 13 can be read on the

"Fetch Program Data " of step S63.

From the above explanation, it is respectfully submitted that the three figures (that is, Figs. 55, 64 and 61) respectively fully support the limitations for the first, second and third type format commands of claim 13 (as well as the first, second and third command formats of claim 14). Therefore, reconsideration and removal of the 35 USC §112, first paragraph, rejection with regard to this issue is respectfully requested.

In addition, Appendix B provides another showing of support for the claim limitations of the three type format commands all within a single figure, specifically, Fig. 57. Fig. 57 is a transition table of commands. As shown in Appendix B, the first type format command can be read on the upper portion of Fig. 57 where a first type format command is provided by the steps of the read operation in the upper part of Fig. 57, while an erase command is provided as the claimed second type format command. As shown in the attached marked copy of Fig. 57 in Appendix B, the claimed third type format command from claim13 (as well as the third command format of claim 14) can be read on the program command shown in Fig. 57. Specifically, as can be seen on the left section of the area marked "third type format command" in Appendix B, a first command is provided for program set up with a sector address input being located after the first command. The third type format command also includes a program data input to read on the claimed data of claims 13 and 14 for the third type format command. Accordingly, it is respectfully submitted that Fig. 57 also provides support for the third type format command of claim 13 (as well as the third command format of claim 14).

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Based upon the foregoing discussion and the attached Appendices A and B, it

is respectfully submitted that the Specification and Drawings of the present

application clearly support the claimed third type format command (and third

command format), and reconsideration and removal of the 35 USC §112, first

paragraph, rejection with regard to this matter is respectfully requested.

Turning to the other rejections set forth in the Office Action, namely, the

obviousness type double patenting rejection and the prior art rejection under 35 USC

§102 based on the Hamakawa reference, it is respectfully submitted that once the

third type format command of claim 13 and the third command format of claim 14 are

considered, both of these rejections are obviated. Specifically, there is no teaching

or suggestion of any such third type format command in Hamakawa as appears to

be recognized in the Office Action. Indeed, it is respectfully submitted that

Hamakawa lacks both the second and third type format commands.

More specifically, Hamakawa discloses that command and data are received

at the same terminal, but the address information is received at different terminals

from the data receive terminal . This is clear, for example, from Fig. 1 of the

reference.

In Fig. 6 of the reference, a timing chart of the data write operation is

provided. It can be seen that the non-volatile memory receives a first value 40H as

command data and a second value 00H as write data from a data bus (e.g., see col.

8, lines 13 to 16). A command decoder than decodes the command data 40H after it

receives a first value. Subsequently, the non-volatile memory receives write data

"00H" from a data bus and the address line "4000H" from the address bus that is

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formed in parallel thereto (e.g., see col. 8, lines 36-56). The non-volatile memory

stores the write data "00H" in an area indicated by the address signal "4000H."

In the Office Action, it is argued that the write data 00H corresponds to the

claimed second type command. Although applicants respectfully disagree with this,

even if one takes this position, it is respectfully submitted that there is no

corresponding arrangement for the claimed third type format command since this

requires a specific arrangement of a first type command, address information, data

and a second type command all within the third type format command applied to a

given input/output terminal. As specified in claim 13:

> "said control circuit is capable of receiving an arbitrary one of a plurality of
> commands via said plurality of input/output terminals."

Claim 13 goes on to define that the plurality of commands includes the first type

format command, the second type format command and the third type format

command. As such, claim 13 clearly defines that, within the third type format

command, the data and the address information are provided to the same IO

terminal within the third type format command. However, in Hamakawa, the address

signal and the data are provided in parallel, not within the same type format

command. Therefore, the address signal in Hamakawa is received at a different

terminal than the terminal which receives the data. Accordingly, once the third type

format command is considered in claim 13, this claim clearly distinguishes over the

Hamakawa reference.

Similarly, claim 14 ends with the recitation:

> "wherein all of said first type command, said second type command, said
> address information and said data are received into an input/output terminal
> of said non-volatile memory."

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Thus, again, an arrangement is defined where the address and data of the third type format command are provided to the same input/output terminal, completely contrary to the arrangement of Hamakawa where the data is received at a separate terminal from the terminal receiving the address signal. Therefore, again, it is respectfully submitted that, once the third type format command is considered in the claim language, claim 14 also clearly defines over the cited prior art to Hamakawa.

Reconsideration and removal of the obviousness type double patenting rejections with regard to the parent U.S. Patent 6,507,520 is also respectfully requested. With regard to this, it is noted that the claims of the parent patent completely fail to teach or suggest the claimed third type format command discussed above. Therefore, it is respectfully submitted that the present independent claims 13 and 14 clearly are not obvious over the claims of the parent patent and reconsideration and removal of the obviousness type double patenting rejection is respectfully requested.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.
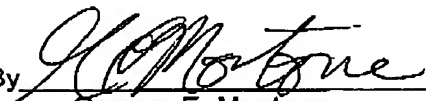
To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of

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                                                            Page 8 of 8

this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus,

LLP Deposit Account No. 01-2135 (Docket No. 501.36887CC8), and please credit

any excess fees to such Deposit Account.

                                    Respectfully submitted,
                                    ANTONELLI, TERRY, STOUT & KRAUS, LLP

                                    By _____
                                        Gregory E. Montone
                                        Reg. No. 28,141

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